

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| CACAAGGAAT | GAGAAGGAGA | TAGATGACTT | GTGATTCGAG | CTCACTTGTA | TCTTGTGTTT |
| -----      | ---ACATAT  | TTGGAGACTA | CAGAAAGGAG | AGAGAAGCT  | CTTTGGTTTT |
|            | *          | ** *       | ** *       | *          | *** **     |

(1)

|            |            |            |                    |                    |            |
|------------|------------|------------|--------------------|--------------------|------------|
| GAGATGG-TG | AAGCAACGAG | CGGTGGGCGC | TGTTATTTGT         | AGGAGGAAAA         | ATGAGTTGAG |
| GAGATGGGTG | AAGCGGCGAG | CAGCAGGCGC | TGTTAT <b>TTAT</b> | <b>AGT</b> GAAGAAG | AGGAGGTGAG |
| ***** *    | ***** *    | ***** *    | ***** *            | ***** *            | ***** *    |

(2)

|            |            |            |            |            |                   |
|------------|------------|------------|------------|------------|-------------------|
| CGGTGGACAC | GTAGAGTTTC | GTGTGTAAGG | CATCTTTTGC | CATCTCTCTA | CTTGCAATGGC       |
| GGAGAGACAC | GTAGGGAAAT | GAGTGTAAGG | AATCCTTTCG | CATTATCTTG | <b>CTTGCAATGC</b> |
| *          | *****      | *****      | *****      | *****      | *****             |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| TTTGAGGCTT | TGAATTGTTA | ACACCTCATT | TGTGTAGCA  | GGGCGAGCAG | GCTATATGCG |
| TTTGAAGCTC | TGAATTGTTT | ACACCTCATT | TTGTGGTTTA | GGG---CAG  | GTGGCTTTCC |
| ***** *    | ***** *    | ***** *    | ***** *    | ***** *    | ***** *    |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| GCAACCAGCG | GTGGGGTTCC | TCGTCAATAT | TGTTGTCTGG | TTCTGAGCTT | GATTTCGACC |
| GCT-TCAGAG | AAAAA---CA | AAGTGAGTTG | AGTTATGTGG | CAACCAGGTG | GG--TGCTCT |
| ** *       | ***** *    | ***** *    | ***** *    | ***** *    | ***** *    |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| TGGCCGTT-T | GGTGAAGTAA | AATTCATGGG | ACTTGGGATC | CGAACCCGGG | CCCATATGAC |
| GAGCCATTGT | TGTTTCTTA  | CTGTCTTGGG | ATT---GGTG | CGTTTCTGAA | ACCCTTTTGG |
| ***** *    | ***** *    | ***** *    | ***** *    | ***** *    | ***** *    |

(3)

|            |                     |                   |                   |            |             |
|------------|---------------------|-------------------|-------------------|------------|-------------|
| TGTGCGTGCT | TGGTGAGAAA          | CGTGAAGTCC        | ACCTGATTGT        | CTGTGATGAG | TTTAATTTGGT |
| CAT---TGCC | TGCT <b>AGAGAAA</b> | <b>CGTGAAGTCC</b> | <b>ATCTGATCGT</b> | CTCTGATCAG | TTTGTGTGGG  |
| *          | *****               | *****             | *****             | *****      | *****       |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| TTTTTTTGTT | TAAATGTTTG | GTCAAATTTG | TTTTACTCGG | AACAAATTGT | TAAGCCTCTG |
| TTCCATTGTT | TTGTTGCCAA | TCCTCATTCA | TATT-CTCTC | TCCTTTTATG | TAAAGTAAAT |
| ** *       | *****      | *****      | *****      | *****      | *****      |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| CTCTATAAGA | AATAAAAAAC | GTTGTTTTGT | GAACATAAAC | GCAATCTTTT | GGCTTAGTTG |
| ---TATTGTA | GTTATTATAA | TTTGGGTACC | ACTCTAATAT | TCTCTCTCCT | TTTTTTCTTT |
| *** **     | *** *      | *****      | *****      | *****      | *****      |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| AGCCAAGAGG | GTCT---CT  | CTCTACAGTT | CCAAATC-CA | AAACCCACAA | CTTCAATGAA |
| TAAAGAAAAG | CTTCCAAGTT | TTTTATAGGA | TCAATTTGTA | AAGTATGAAA | TGCTTTTGTG |
| *****      | *****      | *****      | *****      | *****      | *****      |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| ATTACGAATG | AATGACCTCC | ACTACCACTA | GTATGAATTC | TTTTGTATTT | TCCTGTCAAG |
| GTCTTAAGTA | GCTGATCTCT | --TGTGGCC  | TTTTTGTCTG | ACAGGAAAAA | ACAAAAGAAT |
| ** *       | *****      | *****      | *****      | *****      | *****      |

|            |            |            |            |            |             |
|------------|------------|------------|------------|------------|-------------|
| CAAAAAGGCC | AACAA--GAG | ATCAGCTACT | TAGAACAACA | AAAGCATTTT | ATACTTTTACA |
| TCATACTAGT | GGTAGTGGAG | GTCATTTCAT | CGTAATTTCA | TTGAAGTTGT | GGGTTTGT-G  |
| *** *      | *****      | *****      | *****      | *****      | *****       |

FIG. 1A

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| AATGTATCCT | ATAAAAACT  | TGGAAGCTTT | TCTTTAAAG  | AAAAAAGGA  | GAGAGAATAT |
| ATTTGGAAC  | GTAGAGAG-- | -AGAACCCTC | TTGGCTCAAC | TAAGCCAAAA | GATTGCGTTT |
| * * * *    | * * * *    | * * * *    | * * * *    | * * * *    | * * * *    |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| TAGATGGTA  | CCCAAATTAT | AATAACTCAA | ATA---TTTA | CTTTTACATA | AAAGGAGAGA |
| TAGTTCACAA | AACAACGTTT | TTTATTCTCT | ATAGAGCAGA | GGCTTAACAA | TTTGTTCCGA |
| ***        | ***        | ***        | ***        | ***        | ***        |

|             |            |            |            |             |            |
|-------------|------------|------------|------------|-------------|------------|
| G--AATATGAA | TGAGGATTGG | CAACAAAACA | ATGGAACCCA | CCAAAACCTGA | TCAGAGACGA |
| GTAAAAACAAA | TTTGACCAAA | CATTTAAACA | AAAAAAACCA | ATTAAACTCA  | TCACAGACAA |
| * * * *     | * *        | **         | *****      | *           | *****      |

(3)

|                   |                   |                   |            |            |            |
|-------------------|-------------------|-------------------|------------|------------|------------|
| <b>TCAGATGGAG</b> | <b>TTCACGTTTC</b> | <b>TCAGCAGGCA</b> | ---ATGCCAA | AAGGGTTTCA | GAAACGCACC |
| TCAGGTGGAG        | TTCACGTTTC        | TCACCAAGCA        | CGCACAGTCA | TATGGGCCCG | GGTTCGGATC |
| *****             | *****             | *****             | *          | * * * *    | * * * * *  |

|            |            |            |            |             |            |
|------------|------------|------------|------------|-------------|------------|
| --AATCCCA  | AGACAGTAAG | AAAACAACAA | TGGCTCGAGA | CA---CCCACC | TGGTTGCCAC |
| CCAAGTCCCA | TGAATTTTAC | TTACCA-AA  | CGGCCAGGTG | CAATCAAGC   | TCAGAACCAG |
| * * * * *  | * * * *    | * * * *    | * * * *    | * * * *     | * * * *    |

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| ATAACTCAAC | TCACTTTG-- | TTTTTCTCT  | GAA-GCCGAA | AGCCACCTGC | ---CCTAAA  |
| ACAACAATAT | TGACGAGGAA | CCCCACCGCT | GGTGGCCGCA | TATAGCCTGC | TGCCCTGTCT |
| * * * *    | * * *      | * * *      | *****      | *****      | ***        |

(2)

|            |            |             |            |                   |            |
|------------|------------|-------------|------------|-------------------|------------|
| CCACAAAATG | AGGTGTAAAC | AATTTCAGAGC | TTCAAAGCCA | <b>TGCAAGCAGA</b> | ATAATGGCGA |
| ACACAAAATG | AGGTGTTAAC | AATTCAAAGC  | CTCAAAGCCA | TGCAAGTAGA        | AGAATGGCAA |
| *****      | *****      | *****       | *****      | *****             | *****      |

(1)

|            |            |            |            |            |                    |
|------------|------------|------------|------------|------------|--------------------|
| AGGATTCCTT | ACACTCATTT | CCCTACGTGT | CTCTCCCTCA | CCTCCTCTTC | TTCAC <b>TATAA</b> |
| AAGATGCCTT | ACACACGAAA | CTCTACGTGT | CCACGCCTCA | ACTCATTTTC | CCTCTACAAA         |
| * * * *    | ***        | *          | *****      | ***        | ***                |

|                   |            |            |            |            |            |
|-------------------|------------|------------|------------|------------|------------|
| <b>ATACCAGCGC</b> | CTGCTGCTCG | CGGCTTCACC | CATCTCAAAA | CCAAGAGCT  | TTCTCTCTCC |
| ATACCAGCGC        | CCACCGCTCG | TTGCTTCACC | -ATCTCAAAC | ACAAGATACA | AGTGAGCTCG |
| *****             | * *        | *****      | *****      | **         | ***        |

|            |            |                  |
|------------|------------|------------------|
| TTTCTGTAGT | CTCCAAATAT | GT-----          |
| AATCACAAGT | CATCTATCTC | CTTCTCATTCCTGTGT |
| * * *      | * * *      | *                |

FIG. 1B